Fig. 1

10

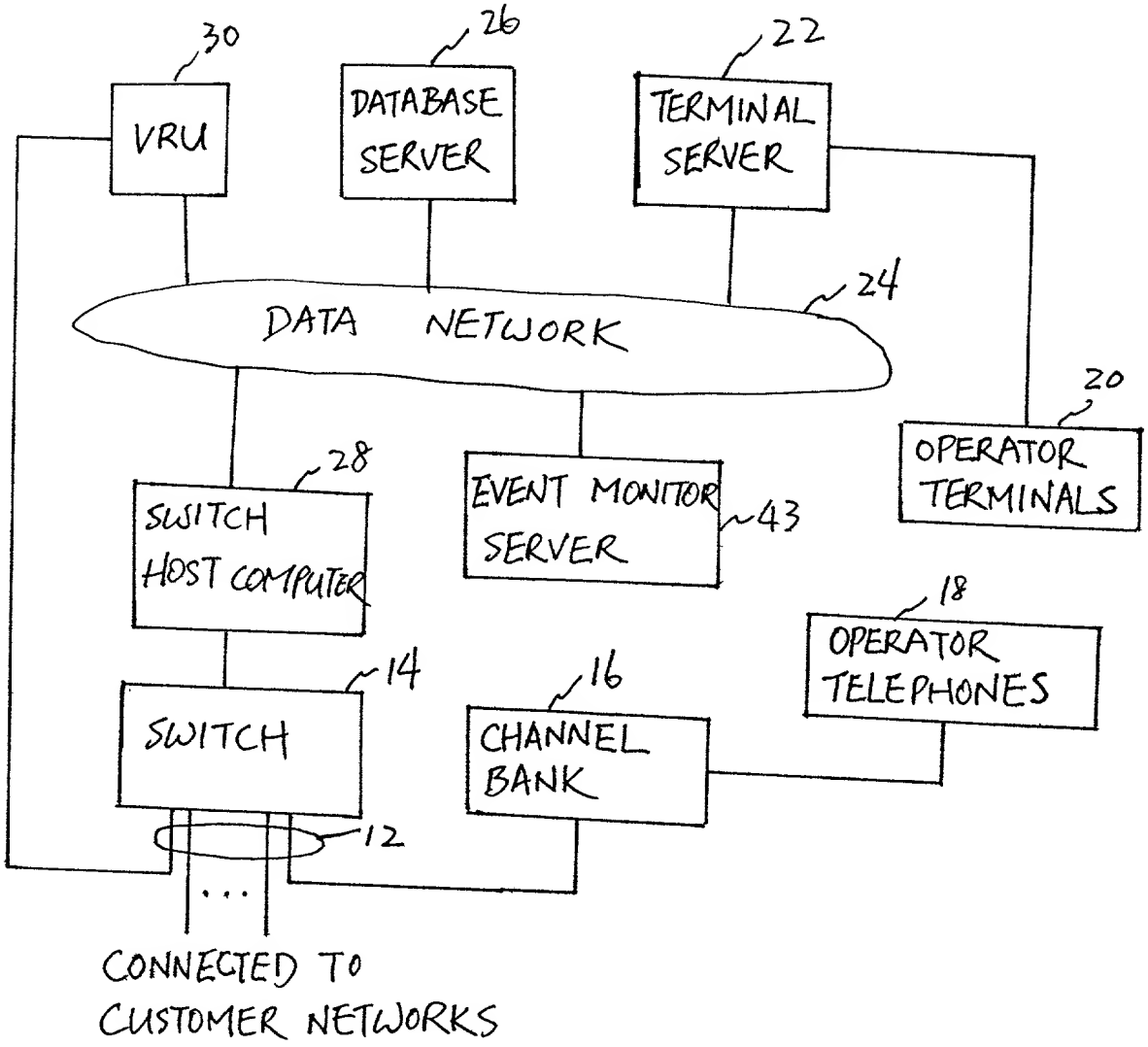

30
VRU
26
DATABASE SERVER
22
TERMINAL SERVER
24
DATA NETWORK
20
OPERATOR TERMINALS
28
SWITCH HOST COMPUTER
EVENT MONITOR SERVER
43
18
OPERATOR TELEPHONES
14
SWITCH
16
CHANNEL BANK
12
CONNECTED TO CUSTOMER NETWORKS

Fig. 2

200

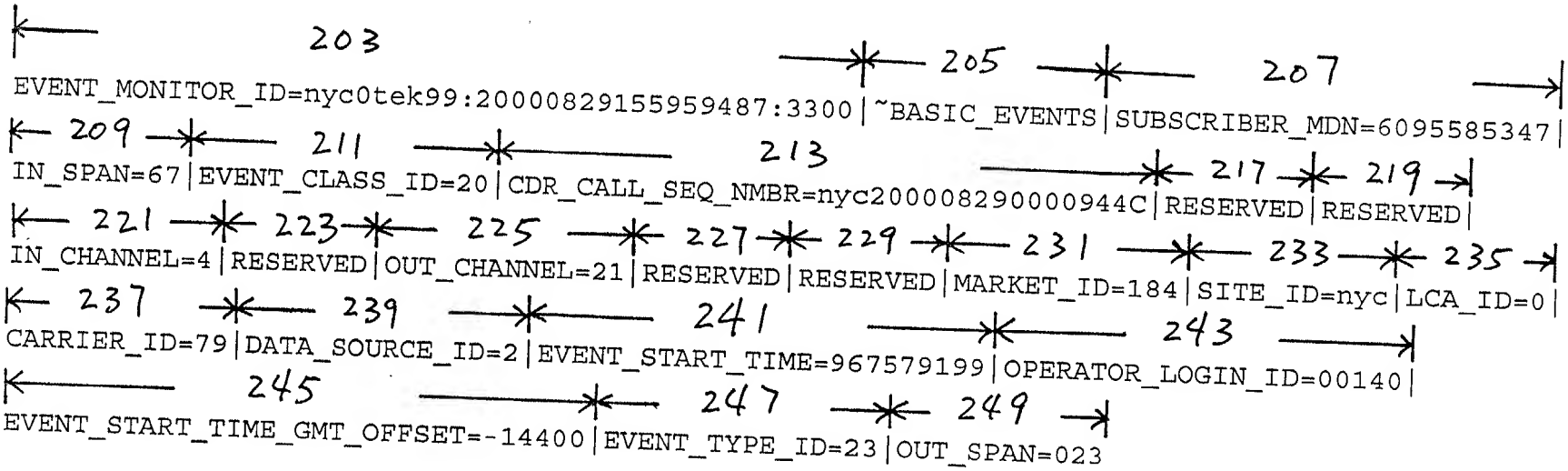

203
205
207
EVENT_MONITOR_ID=nyc0tek99:20000829155959487:3300|~BASIC_EVENTS|SUBSCRIBER_MDN=6095585347|
209
211
213
217
219
IN_SPAN=67|EVENT_CLASS_ID=20|CDR_CALL_SEQ_NMBR=nyc200008290000944C|RESERVED|RESERVED|
221
223
225
227
229
231
233
235
IN_CHANNEL=4|RESERVED|OUT_CHANNEL=21|RESERVED|RESERVED|MARKET_ID=184|SITE_ID=nyc|LCA_ID=0|
237
239
241
243
CARRIER_ID=79|DATA_SOURCE_ID=2|EVENT_START_TIME=967579199|OPERATOR_LOGIN_ID=00140|
245
247
249
EVENT_START_TIME_GMT_OFFSET=-14400|EVENT_TYPE_ID=23|OUT_SPAN=023

Fig. 3

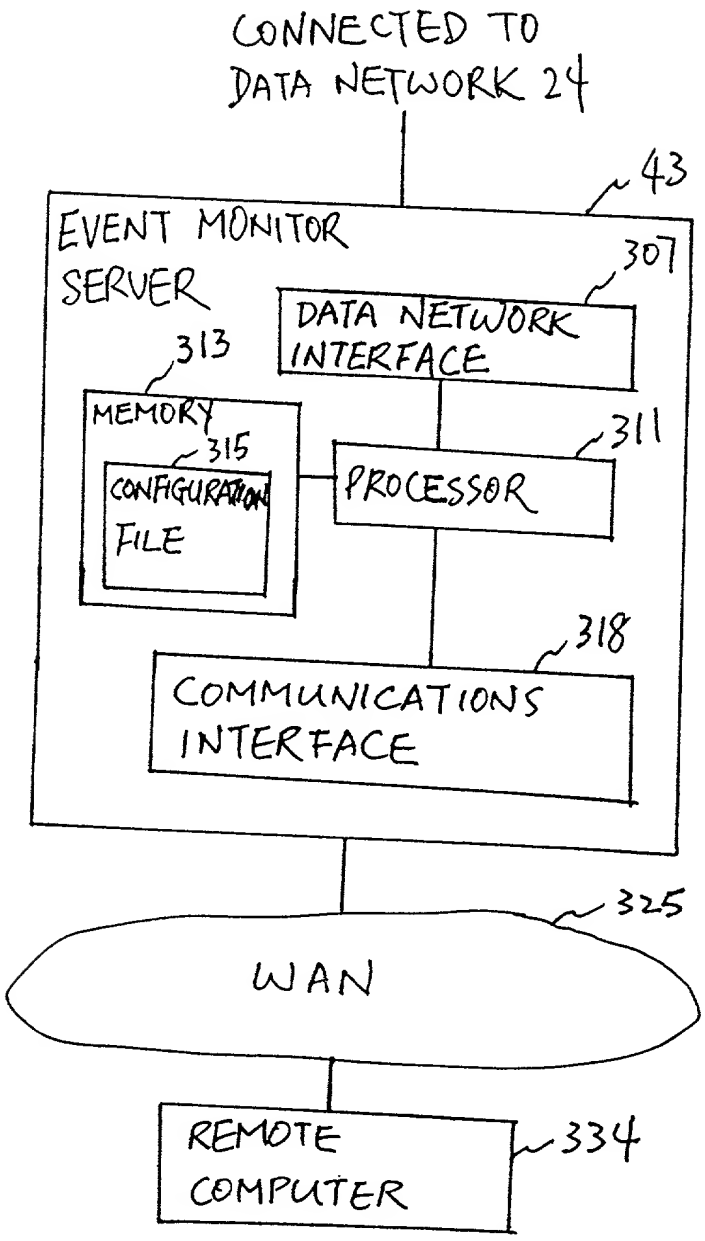

CONNECTED TO
DATA NETWORK 24
43
EVENT MONITOR
SERVER
307
DATA NETWORK
INTERFACE
313
MEMORY
315
CONFIGURATION
FILE
311
PROCESSOR
318
COMMUNICATIONS
INTERFACE
325
WAN
REMOTE
COMPUTER
334

Fig. 4

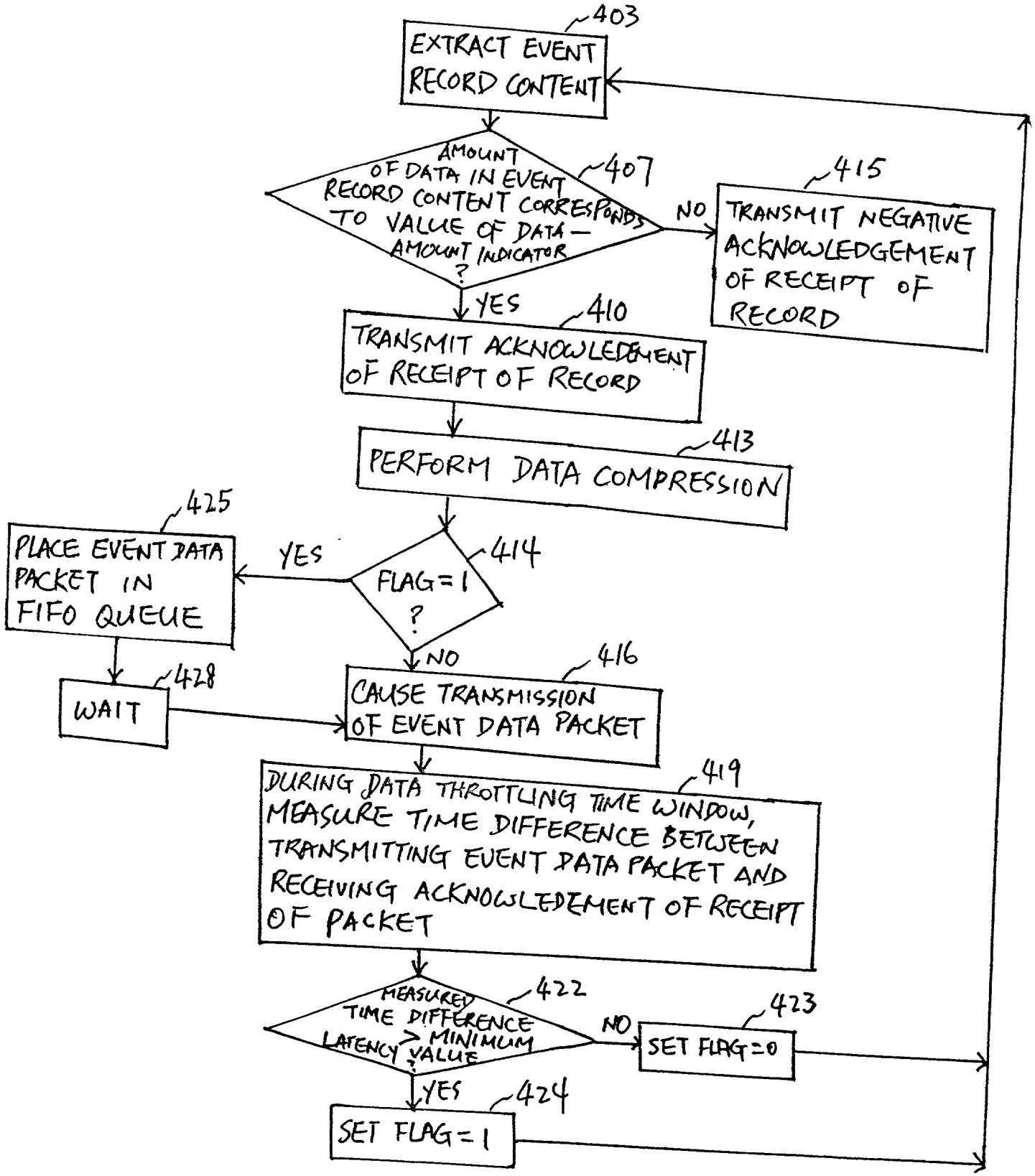

403
EXTRACT EVENT RECORD CONTENT
AMOUNT OF DATA IN EVENT RECORD CONTENT CORRESPONDS TO VALUE OF DATA-AMOUNT INDICATOR ?
407
NO
415
TRANSMIT NEGATIVE ACKNOWLEDGEMENT OF RECEIPT OF RECORD
YES
410
TRANSMIT ACKNOWLEDGEMENT OF RECEIPT OF RECORD
413
PERFORM DATA COMPRESSION
425
PLACE EVENT DATA PACKET IN FIFO QUEUE
YES
414
FLAG=1 ?
NO
428
WAIT
416
CAUSE TRANSMISSION OF EVENT DATA PACKET
419
DURING DATA THROTTLING TIME WINDOW, MEASURE TIME DIFFERENCE BETWEEN TRANSMITTING EVENT DATA PACKET AND RECEIVING ACKNOWLEDGEMENT OF RECEIPT OF PACKET
MEASURED TIME DIFFERENCE > MINIMUM LATENCY VALUE ?
422
NO
423
SET FLAG=0
YES
424
SET FLAG=1

Fig. 5

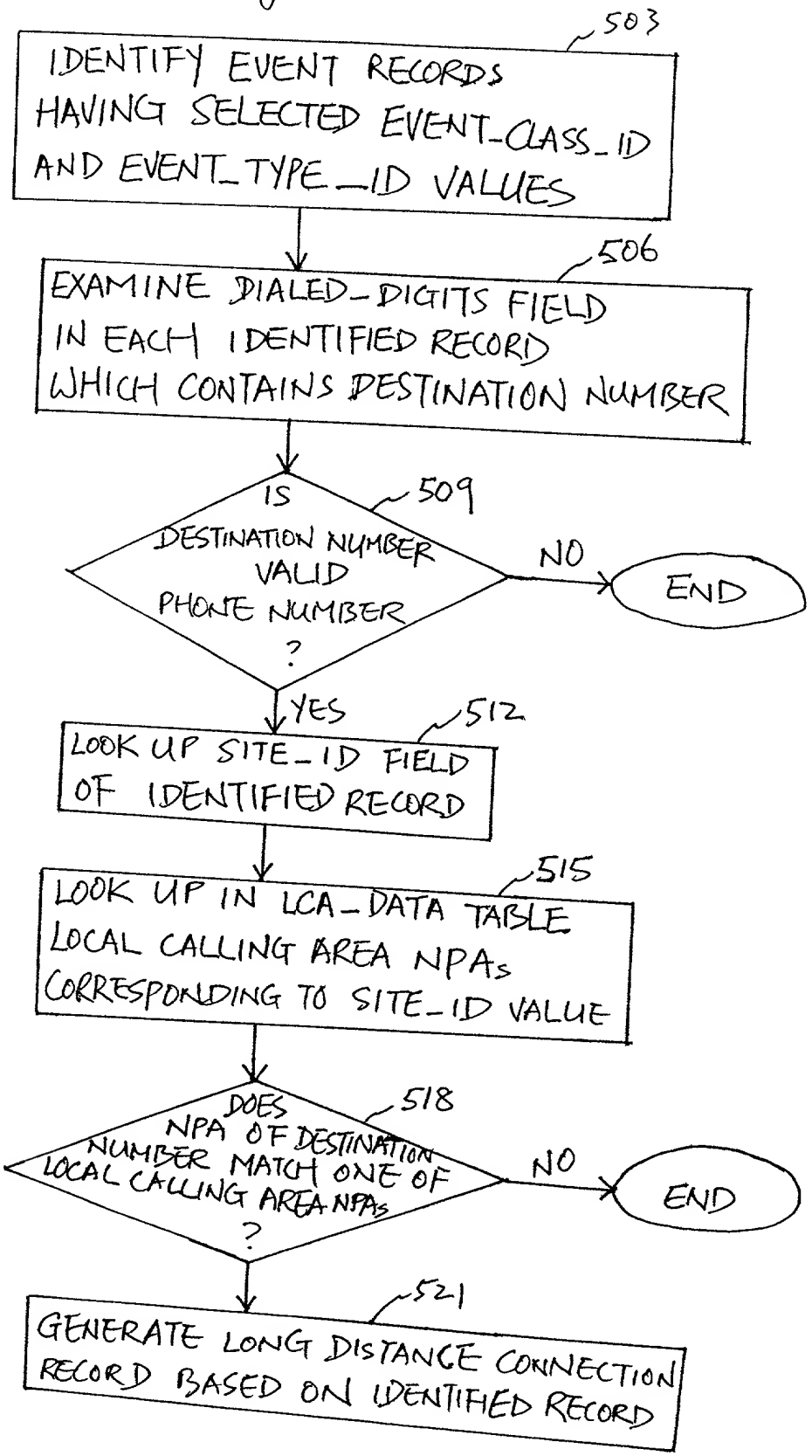

503
IDENTIFY EVENT RECORDS HAVING SELECTED EVENT_CLASS_ID AND EVENT_TYPE_ID VALUES
506
EXAMINE DIALED_DIGITS FIELD IN EACH IDENTIFIED RECORD WHICH CONTAINS DESTINATION NUMBER
509
IS DESTINATION NUMBER VALID PHONE NUMBER ?
NO
END
YES
512
LOOK UP SITE_ID FIELD OF IDENTIFIED RECORD
515
LOOK UP IN LCA_DATA TABLE LOCAL CALLING AREA NPAs CORRESPONDING TO SITE_ID VALUE
518
DOES NPA OF DESTINATION NUMBER MATCH ONE OF LOCAL CALLING AREA NPAs ?
NO
END
521
GENERATE LONG DISTANCE CONNECTION RECORD BASED ON IDENTIFIED RECORD

Fig. 6

600

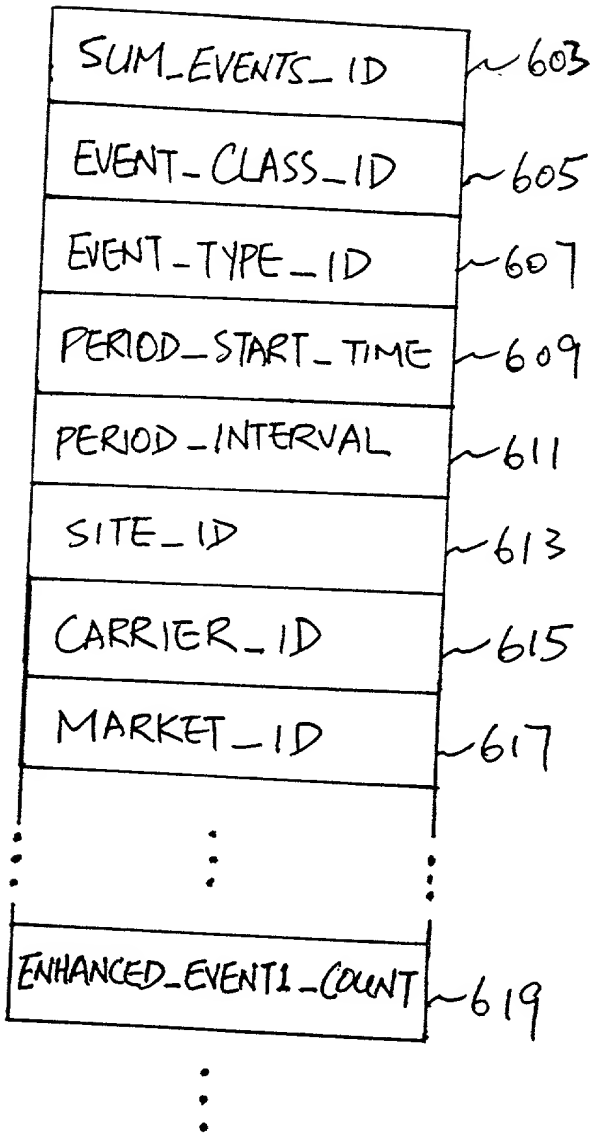

SUM_EVENTS_ID
603
EVENT_CLASS_ID
605
EVENT_TYPE_ID
607
PERIOD_START_TIME
609
PERIOD_INTERVAL
611
SITE_ID
613
CARRIER_ID
615
MARKET_ID
617
ENHANCED_EVENT1_COUNT
619

Fig. 7

700

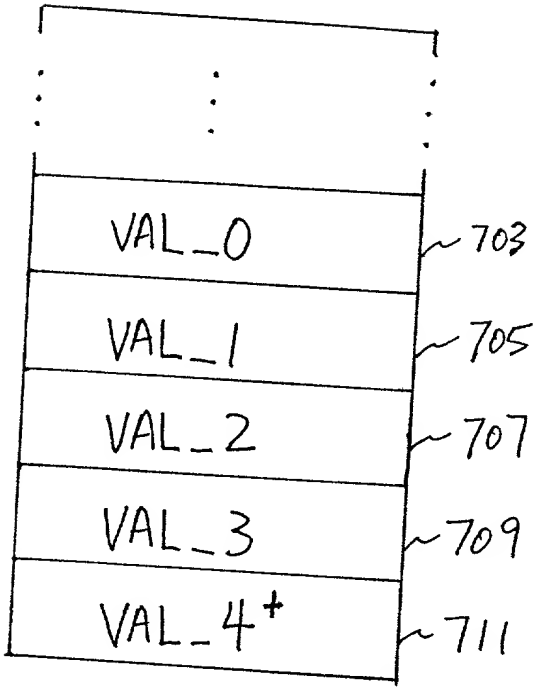


Fig. 8

800

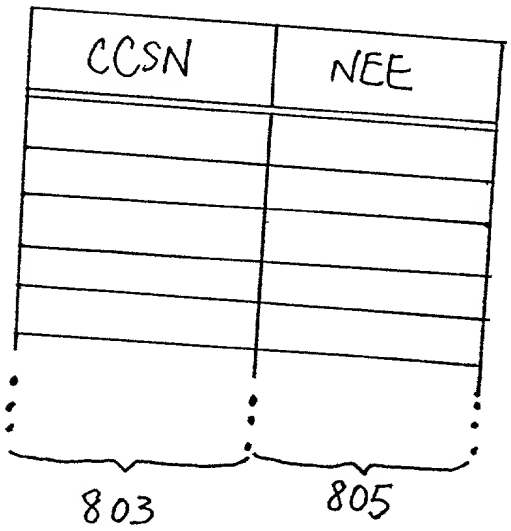
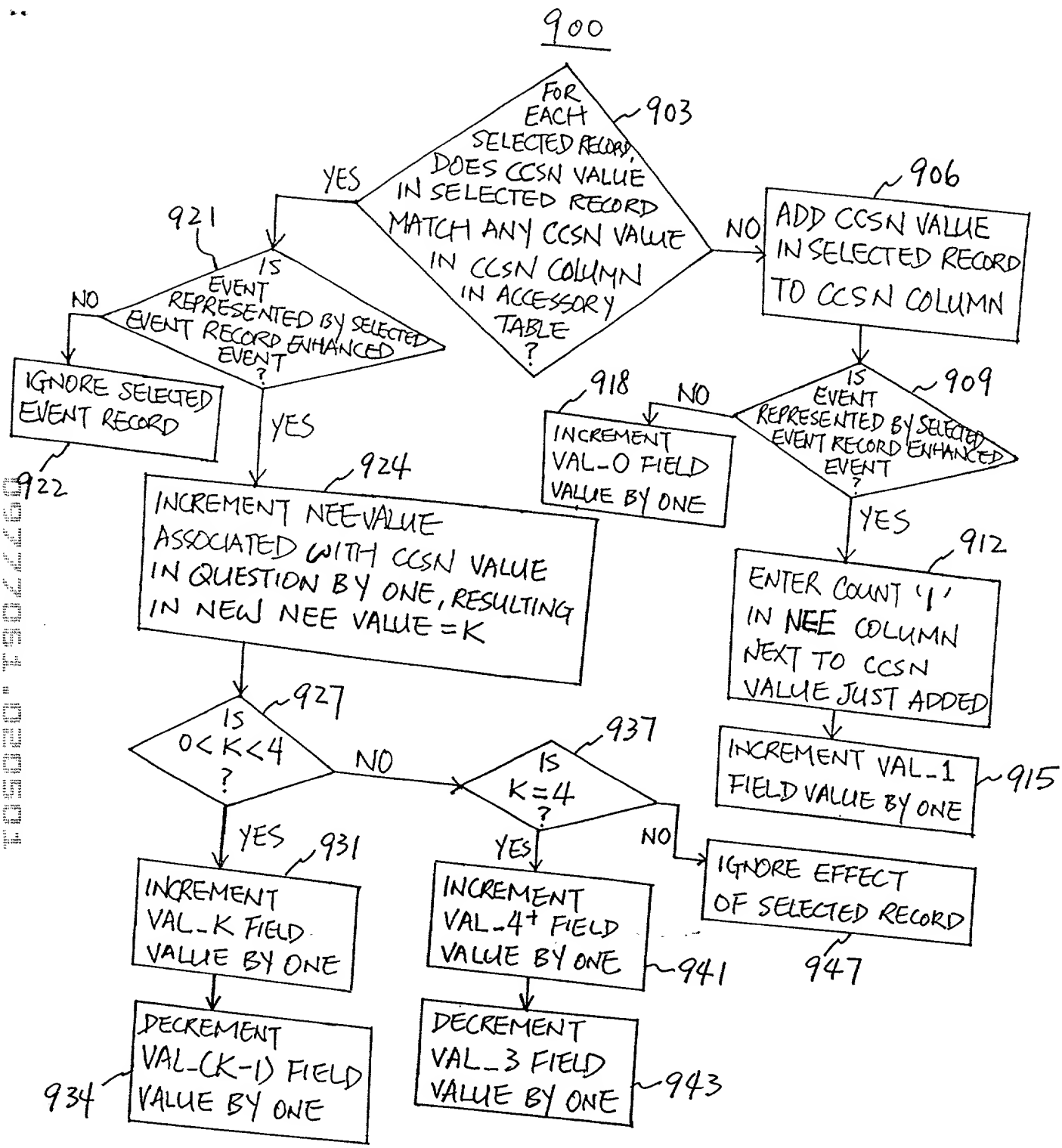


Fig. 9



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